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PTO/SB/21 (02-04) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE der the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/501.276 TRANSMITTAL Filing Date July 9, 2004 **FORM** First Named Inventor Johannes F. de Boer Art Unit 2587 (to be used for all correspondence after initial filing) **Examiner Name** To be assigned Attorney Docket Number 036115/US/2 - 475387-00016 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication Fee Transmittal Form Drawing(s) to Technology Center (TC) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Amendment/Reply Petition (Appeal Notice, Brief, Reply Brief) Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please **Terminal Disclaimer Extension of Time Request** Identify below): PTO-1449 form and 24 references and Request for Refund **Express Abandonment Request** Return receipt postcard CD, Number of CD(s) Information Disclosure Statement Remarks Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm DORSEY & WHITNEY, LLP Gary Abelev, Esq. (Reg No. 40,479) Individual name Signature Date April 22, 2005 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name Gary Abelev, Esq.

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature

Date

April 22, 2005

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

: Johannes F. de Boer et al.

Serial No.

10/501,276

Filed

July 9, 2004

Entitled

APPARATUS AND METHOD FOR RANGING AND NOISE REDUCTION OF LOW COHERENCE INTERFEROMETRY LCI AND OPTICAL COHERENCE TOMOGRAPHY OCT SIGNALS BY PARALLEL DETECTION OF SPECTRAL

**BANDS** 

Group Art Unit

2857

Examiner

To be assigned

#### **INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 I hereby certify that this document is being sent via First Class U. S. mail addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this day of April 20, 2005.

(Signature)

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached Form PTO 1449, and respectfully request that the listed documents be considered by the Examiner and made of record in the above-captioned application. Copies of the United States patent references listed on the Form PTO-1449 are not enclosed, but the PCT, foreign and non-patent references are enclosed.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed documents are material or constitute "prior art." If the Examiner applies the documents as prior art against any claim in the

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application and applicants determine that the cited documents do not constitute "prior art" under

United States law, applicants reserve the right to present to the Office the relevant facts and law

regarding the appropriate status of the documents.

Applicants further reserve the right to take appropriate action to establish the

patentability of the disclosed invention over the listed documents, should the documents be

applied against the claims of the present application.

This submission is being filed before any action by the U.S. Patent and

Trademark Office on the merits. Therefore, applicants do not believe that any fee is due in

connection with the submission of this paper. However, if any fee is due, or if any overpayment

has been made, the Commissioner is authorized to charge any such fee or credit any

overpayment, to our Deposit Account No. 50-2054.

Respectfully submitted,

DORSEY & WHITNEY, LLP

Gary Abelev

PTO Reg. No. 40,479

Attorneys for Applicants

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4847-0377-1392\1

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EORMATION DISCLOSURE STATEMENT
BY APPLICANT

(Use several sheets if necessary)

Atty. Docket No. 036115/US/2 – 475387-00016

Serial No. 10/501,276

Applicant(s)

Johannes F. de Boer et al.

Filing Date July 9, 2004 Group 2857

#### **U.S. PATENT DOCUMENTS**

Exam.			Docun	nent N	D.			Date	Name	Cla	Subclass	Filing Date if Appropriate
	2	3	3	9	7	5	4	January 25, 1944	P.H. Brace			
	 4	6	0	1	0	3	6	July 15, 1986	Faxvog et al			
	 4	6	3	1	4	9	8	December 23, 1986	Cutler			
	4	8	6	8	8	3	4	September 19, 1989	Fox et al			
	4	9	2	5	3	0	2	May 15, 1990	Cutler			
	 4	9	6	5	4	4	1	October 23, 1990	Picard			
	4	9	9	3	8	3	4	February 19, 1991	Carlhoff et al			
	 5	0	4	0	8	8	9	August 20, 1991	Keane			
	5	0	4	6	5	0	1	September 10, 1991	Crilly			
	5	1	2	0	9	5	3	June 9, 1992	Harris			
	5	1	9	7	4	7	0	March 30, 1993	Helfer et al			,
	5	2	9	3	8	7	2	March 15, 1994	Alfano et al			
	5	3	2	1	5	0	1	June 14, 1994	Swanson et al			
	5	3	5	3	7	9	0	October 11, 1994	Jacques et al			
	5	3	8	3	4	6	7	January 24, 1995	Auer et al			1
	5	4	1	9	3	2	3	May 30, 1995	Kittrell et al			<u> </u>
	5	4	3	9	0	0	0	August 8, 1995	Gunderson et al			
	 5	4	4	1	0	5	3	August 15, 1995	Lodder et al			
	 5	4	5	9	5	7	0	October 17, 1995	Swanson et al			
	 5	4	6	5	1	4	7	November 7, 1995	Swanson			
	 5	4	8	6	7	0	1	January 23, 1996	Norton et al			
	5	4	9	1	5	5	2	February 13, 1996	Knuttel			<u> </u>
	 5	5	6	2	1	0	0	October 8, 1996	Kittrell et al			
	5	5	8	3	3	4	2	December 10, 1996	Koji Ichie			
	 5	5	9	0	6	6	0	January 7, 1997	MacAulay et al			

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<sup>\*</sup> Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Serial No. 10/501,276

Applicant(s)

Johannes F. de Boer et al.

Filing Date Group July 9, 2004 2857

		5	6	0	1	0	8	7	February 11, 1997	Richards-Kortum et	
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		5	6	9	7	3	7	3	December 16, 1997	Gunderson et al	
		5	7	1	9	3	9	9	February 17, 1998	Alfano et al	
		5	7	4	8	5	9	8	May 5, 1998	Swanson et al	
		5	7	8	4	3	5	2	July 21, 1998	Swanson et al.	
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		5	8	7	1	4	4	9	February 16, 1999	David Lloyd Brown	
		5	9	2	1	9	2	6	July 13, 1999	Rolland et al	
•		5	9	5	6	3	5	5	September 21, 1999	Swanson et al	
		5	9	6	8	0	6	4	October 19, 1999	Selmon et al	
		5	9	8	7	3	4	6	November 16, 1999	Benaron et al	
		5	9	9	4	6	9	0	November 30, 1999	Kulkarni et al	
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	·	6	0	3	3	7	2	1	March 7, 2000	Nikos Nassuphis	
		6	0	4	4	2	8	8	March 28, 2000	Wake et al	
		6	0	4	8	7	4	2	April 11, 2000	Weyburne et al	
		6	0	6	9	6	9	8	May 30, 2000	Ozawa et al	
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	<del> </del>	6	1	1	1	6	4	5	August 29, 2000	Tearney et al	
		6	1	1	7	1	2	8	September 12, 2000	Kenton W. Gregory	14-1-1
					<u> </u>	<u> </u>	<u></u>				

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<sup>\*</sup> Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Atty. Docket No. 036115/US/2 – 475387-00016

Serial No. 10/501,276

Applicant(s)

Johannes F. de Boer et al.

Filing Date Group July 9, 2004 2857

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	6	1	2	0	5	1	6	September 19, 2000	Selmon et al	
	6	1	5	1	5	2	2	November 21, 2000	Alfano et al	
	6	1	5	-9	4	4	5	December 12, 2000	Klaveness et al	
	6	1	6	0	8	2	6	December 12, 2000	Swanson et al	
	6	1	6	1	0	3	1	December 12, 2000	Hochmann et al	
	6	1	7	5	6	6	9	January 16, 2001	Colston et al	
	6	1	8	5	2	7	1	February 6, 2001	Richard Estyn Kinsinger	
	6	1	9	1	8	6	2	February 20, 2001	Swanson et al	
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	6	3	7	7	3	4	9	April 23, 2002	Adolf Friedrich Fercher	
	6	4	2	1	1	6	4	July 16, 2002	Tearney et al	
	6	4	8	5	4	1	3	November 26, 2002	Boppart et al	
	6	4	8	5	4	8	2	November 26, 2002	W. Martin Belef	
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Examiner	Date Considered
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<sup>\*</sup> Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Atty. Docket No. 036115/US/2 – 475387-00016

Serial No. 10/501,276

Applicant(s)

Johannes F. de Boer et al.

Filing Date July 9, 2004 Group 2857

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		Docun	nent No	0.			Date	Country	Class	SubClass	Translator Yes No	
4	3	0	9	0	5	6	September 22, 1994	Germany			Tes No	
2	2	0	9	2	2	1	May 4, 1989	Great Britain				
0	1	1	0	2	0	1	June 13, 1984	European	1	<u> </u>		
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 9	8	3	5	2	0	3	August 13, 1998	WIPO				
9	9	4	4	0	8	9	September 2, 1999	WIPO				
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0	0	5	8	7	6	6	October 5, 2000	WIPO	<u> </u>			
 0	1	4	2	7	3	5	June 14, 2001	WIPO				
 0	2	5	4	0	2	7	July 11, 2002	WIPO				

OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.)
"High Resolution in Vivo Intra-Arterial Imaging with Optical Coherence Tomography" by Jujimoto
et al., in the Official Journal of the British Cardiac Society, Vol. 82, pages 128-133 Heart - 1999,
"Optical Coherence Tomography" by D. Huang et al., in SCIENCE, Vol. 254, pages 1178-1181,
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<sup>\*</sup> Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Page 5 of 5 Form PTO-1449 U.S. Department of Commerce Atty. Docket No. Serial No. (REV. 2-82) Patent and Trademark Office 036115/US/2 - 475387-10/501,276 00016 INFORMATION DISCLOSURE STATEMENT BY APPLICANT Applicant(s) Johannes F. de Boer et al. (Use several sheets if necessary) Filing Date Group July 9, 2004 2857 "High-Speed Phase –and Group Delay Scanning with a Grating Based Phase Control Delay Line" by Tearney, et al., in Optics Letters, Vol. 22, Pages 1811-1813, December, 1997 "In Vivo Video Rate Optical Coherence Tomography" by Rollins, et al., in the Optics Express, Vol. 3, pages 219-229, September, 1998 High Speed Fiber-Based Polarization-Sensitive Optical Coherence Tomography of in Vivo Human Skin" by Saxer, et al., in the Optical Society of America, Vol. 25, pages 1355-1357. September, 2000 "3000 Times Grating Compress or with Positive Group Velocity Dispersion" by Oscar Eduardo Martinez, in the IEEE, Vol. QE-23, pages 59-64, January, 1987 "Image Enhancement in Optical Coherence Tomography Using Deconvolution" by Kulkarni, et al., in the Electronics Letters, Vol. 33, pages 1365-1367, July, 1997 "Signal Processing for Improving Field Cross-Correlation Function in Optical Coherence Tomography" by Bashkansky, et al., in the Optics & Photonics News, Vol. 9, pages 8137-8138, May, 1998 "Phase-Domain Processing of Optical Coherence Tomography Images" by Yung, et al., in

the Journal of Biomedical Optics, Vol. 4, pages 125-136, January, 1999

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Vol. 24, pp. 1221-3, Sept. 1999

"In Vivo Endoscopic Optical Biopsy with Optical Coherence Tomography" by Tearney, et al., in

"In Vivo Ultrahigh-Resolution Optical Coherence Tomography" by W. Drexler et al., Opt. Lett.

4822-2074-3424\1

Examiner Date Considered

<sup>\*</sup> Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.